

Date: Wed, 1 Jun 94 04:30:09 PDT
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>
Errors-To: Ham-Ant-Errors@UCSD.Edu
Reply-To: Ham-Ant@UCSD.Edu
Precedence: Bulk
Subject: Ham-Ant Digest V94 #165
To: Ham-Ant

Ham-Ant Digest Wed, 1 Jun 94 Volume 94 : Issue 165

Today's Topics:

2 meter thru-glass (Saturn)
Apartment rain gutters on 40M (3 msgs)
Dipole help (5 msgs)
ES

Grid Dip Oscillator or Noise Bridge? (2 msgs)
Maltese quad

where to buy Channel Master FM antenna? recommendations on signal amp?

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>

Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>

Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 31 May 1994 21:50:53 GMT
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!convex!news.duke.edu!solaris.cc.vt.edu!
news.ans.net!sitka.wsipc.wednet.edu!connected.com!openwx!hays@network.ucsd.edu
Subject: 2 meter thru-glass (Saturn)
To: ham-ant@ucsd.edu

David Drumheller (drumhell@claudette.nrl.navy.mil) wrote:

: Just adding another 'branch' to this thread...

: A few months ago I posted a few questions about through-the-glass
: antennas. I had recently purchased a 1993 Saturn SL, and was wondering
: what other Saturn owners had done to install through-the-glass on their

: By the way, has anyone ever *removed* a through-the-glass antenna? How
: difficult is it? Is the adhesive difficult to remove? Does it leave a

: stain or mark on the glass? Is it difficult to avoid damage the antenna?
: --
: David Drumheller, KA3QBQ phone: (202) 767-3524
: Acoustics Division, Code 7140 fax: (202) 404-7732
: Naval Research Laboratory
: Washington, DC 20375-5350 e-mail: drumhell@claudette.nrl.navy.mil

David,

I also drive a '93 Saturn (SL2). I decided to bite the bullet and drill the chassis. I put an NMO mount in the lid to the trunk. It turns out that if you mount it a little back of the center of the lid, coax feeds nicely. I routed the coax to the front of the car (under the carpet, near the moldings). I then took my DR-590T (with remotable head) and mounted the body near the blower on the passenger side, and routed the cable up into the space under the dash. I mounted the head and microphone to the plastic molding which goes around the driver's console and the air vents. I figure that when it comes time to sell, I will replace the molding and put a cellular antenna on the NMO

John D. Hays

KD7UW

Email: jhays@hays.org or hays@networx.com

Date: Tue, 31 May 94 11:37:02 EDT
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!usenet.ins.cwru.edu!
ns.mcs.kent.edu!kira.cc.uakron.edu!malgudi.oar.net!hypnos!voxbox!
jgrubs@network.ucsd.edu
Subject: Apartment rain gutters on 40M
To: ham-ant@ucsd.edu

-----BEGIN PGP SIGNED MESSAGE-----

davev@miles.ATkc.COM (David P. van De Kerk) writes:

> My apartment building has a no antenna policy, but they have this beautiful
> system of aluminum rain gutters going up and down the building. (two story)
> so it's kind of like a long wire that goes up and down the building, directly
> connected to the building. Anybody tried using the rain gutter on their
> apartment? Does it work? How will the SWR be? I have an MFJ 945 C tuner
> and a Radio Shack nearby for parts to make this work. What
> should I feed it with? Right now, I have coax feeding it, which
> I can receive with but haven't tried to transmit yet.

Try one or another variation on shunt feeding.

-----BEGIN PGP SIGNATURE-----

Version: 2.6

iQCVAwUBLetaETDUWq8RWEeNAQHmwP/YiZD0Th1CWV2v8uttE5gluyMIqB/n6LK
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fc0iwneuaAplR8+DRrqYhZIGjcQBf0Sk5aVhjmTGxeMbEieLiZivNIVQCRAJ2gTF
OgNt/3T3lUs=

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-----END PGP SIGNATURE-----

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+-----+
| Jim Grubs, W8GRT          Voxbox Enterprises   THIS SPACE FOR RENT |
| jgrubs@voxbox.norden1.com 6817 Maplewood Ave.  RATES REASONABLE   |
| Fido: 1:234/1.0          Sylvania, Ohio 43560 Home: 419/882-2697  |
|                           AMATEUR RADIO - The National Park of the Mind |
+-----+
```

Date: 31 May 1994 17:30:41 GMT

From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!math.ohio-state.edu!

magnus.acs.ohio-state.edu!peri.acs.ohio-state.edu!rdixon@network.ucsd.edu

Subject: Apartment rain gutters on 40M

To: ham-ant@ucsd.edu

|>

|> davev@miles.ATkc.COM (David P. van De Kerk) writes:

|>

|> > My apartment building has a no antenna policy, but they have this beautiful
|> > system of aluminum rain gutters going up and down the building. (two story)
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|> > and a Radio Shack nearby for parts to make this work. What
|> > should I feed it with? Right now, I have coax feeding it, which
|> > I can receive with but haven't tried to transmit yet.

|>

I have used the rain gutter system on a house as an antenna. I ran a single wire
out

the window, and connected it to the metal gutter. I tuned it with a longwire
antenna

tuner, and it worked fine. I told people during QSO's and on my QSL card that I
was using an "end fed rain gutter" as an antenna (even though it was actually fed
somewhere nearer the middle). I worked lots of DX on 40 and 20 meters with 90
watts.

Bob W8ERD

Date: 31 May 94 21:31:30 GMT
From: sdd.hp.com!col.hp.com!srngenprp!alanb@hplabs.hpl.hp.com
Subject: Apartment rain gutters on 40M
To: ham-ant@ucsd.edu

Andy Domonkos (domonkos@delphi.com) wrote:

: >My apartment building has a no antenna policy, but they have this beautiful
: >system of aluminum rain gutters going up and down the building. (two story)
: >so it's kind of like a long wire that goes up and down the building,
: directly connected to the building. Anybody tried using the rain gutter on
: >their apartment? Does it work? How will the SWR be? I have an MFJ 945 C
: >tuner and a Radio Shack nearby for parts to make this work. What
: >should I feed it with? Right now, I have coax feeding it, which
: >I can receive with but haven't tried to transmit yet.

: It'll work w/tuner but unless you can strap the gutter joints w/jumpers man
: you'll have some bad RFI problems (rectification at the gutter joints).

Or you may get lucky and have no RFI problems. Try it, and check your own
TV for interference. (Check each TV channel on every amateur band you
intend to use.) It would be a good idea to re-check every now and then,
especially when the weather changes.

: If you have access to an attic (even if only a crawlspace) a slinky dipole
: will work great. ...

If you have rusty, rectifying rain gutters, the attic dipole can cause
problems also, due to RF pickup by the rain gutters. Do the TVI test
with your own TV before doing any extensive operating.

AL N1AL

Date: 31 May 1994 16:50:29 GMT
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!europa.eng.gtefsd.com!
news.umbc.edu!eff!news.kei.com!ssd.intel.com!chnews!cmoore@network.ucsd.edu
Subject: Dipole help
To: ham-ant@ucsd.edu

armond@delphi.com wrote:

: the human ear, on a steady tone, can detect a 2dB difference.....for many,
: a 1dB difference can be discerned.

I assume this is in response to my statement that a human ear cannot detect a 2dB difference. That statement was in the context of a 2dB difference in radiated RF from an antenna. Some sort of AGC is usually involved at the receiving end. So I should have been more specific.

Human ears cannot detect a 2dB difference in received RF signal strength under normal HF conditions using average HF receivers. After all, 2dB is 1/3 of an S-unit. I personally, have trouble detecting a one S-unit change (6dB) with the AGC on since the audio does not change as much as the RF. The dynamic range of the audio section of an average superhet is much less than the dynamic range of the RF section.

73, KG7BK, CecilMoore@delphi.com

Date: 31 May 1994 18:24:14 GMT
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!vixen.cso.uiuc.edu!
usenet@network.ucsd.edu
Subject: Dipole help
To: ham-ant@ucsd.edu

In <2sfpsl\$a50@chnews.intel.com>, cmoore@ilx018.intel.com (Cecil A. Moore -FT-~) writes:

>armond@delphi.com wrote:

>: the human ear, on a steady tone, can detect a 2dB difference.....for many,
>: a 1dB difference can be discerned.

>

>I assume this is in response to my statement that a human ear cannot
>detect a 2dB difference. That statement was in the context of a 2dB
>difference in radiated RF from an antenna. Some sort of AGC is usually
>involved at the receiving end. So I should have been more specific.

>

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>under normal HF conditions using average HF receivers. After all, 2dB is
>1/3 of an S-unit. I personally, have trouble detecting a one S-unit
>change (6dB) with the AGC on since the audio does not change as much as
>the RF. The dynamic range of the audio section of an average superhet is
>much less than the dynamic range of the RF section.

>

>73, KG7BK, CecilMoore@delphi.com

>

Here is a more valid question: If one station is +2db over the other one, can you tell a difference? If both are calling you, which one would you copy better?

Ignacy Misztal Ham radio: N09E, SP8FWB
E-mail: ignacy@uiuc.edu
University Of Illinois 1207 W. Gregory Dr., Urbana, IL 61801, USA
tel. (217) 244-3164 Fax: (217) 333-8286

Date: 31 May 1994 20:54:26 GMT
From: ihnp4.ucsd.edu!usc!cs.utexas.edu!convex!news.duke.edu!eff!news.kei.com!
ssd.intel.com!chnews!cmoore@network.ucsd.edu
Subject: Dipole help
To: ham-ant@ucsd.edu

Ignacy Misztal (ignacy@misz.animal.uiuc.edu) wrote:

: Here is a more valid question: If one station is +2db over the other
: one, can you tell a difference? If both are calling you, which one
: would you copy better? Ignacy Misztal Ham radio: N09E, SP8FWB

Hi Ignacy, assuming the two HF stations are within 2dB (RF) of each other
and on the same frequency, you could not tell the difference just by
listening and you would be able to copy neither one "if both are
calling you" simultaneously on SSB. On CW you could probably measure a
difference with a meter but not with your ears.

Can you tell the difference between an S9 station and an S9+2dB station?
I can't with my ears nor with my S-meter. Under certain threshold
conditions, you might be barely unable to read an S1 station and barely
able to read an S1+2dB station but QSB would, no doubt, make both QSOs
unsuccessful. Sometimes QSB varies my received signals by 12dB or more
every few seconds. Threshold QSOs are really tough.

73, KG7BK, CecilMoore@delphi.com

Date: 1 Jun 1994 00:26:09 GMT
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!news.umbc.edu!eff!
news.kei.com!ssd.intel.com!chnews!cmoore@network.ucsd.edu
Subject: Dipole help
To: ham-ant@ucsd.edu

Robert Casey (wa2ise@netcom.com) wrote:

: If on FM, capture effect will only let you hear the stronger station,
: and wipe out the one 2dB weaker.

Hi Robert, I think maybe there has to be more than 2dB difference for
the capture effect to wipe out the weaker station. During net checkins,

I often hear doubling, tripling, etc. where I cannot understand anybody because I'm hearing everybody all at once, just like SSB.

73, KG7BK, CecilMoore@delphi.com

Date: Wed, 1 Jun 1994 06:16:19 GMT
From: ihnp4.ucsd.edu!news.cerf.net!ent-img.com!wb6hqm!bart@network.ucsd.edu
Subject: Dipole help
To: ham-ant@ucsd.edu

In article <2sfpsl\$a50@chnews.intel.com>,
>

>Human ears cannot detect a 2dB difference in received RF signal strength
>under normal HF conditions using average HF receivers. After all, 2dB is
>1/3 of an S-unit. I personally, have trouble detecting a one S-unit
>change (6dB) with the AGC on since the audio does not change as much as
>the RF. The dynamic range of the audio section of an average superhet is
>much less than the dynamic range of the RF section.

The purpose of the AGC in a SSB receiver is to maintain a constant audio output level for a varying input amplitude. Assuming the AGC is working well, and the Signal to Noise ratio (SNR) is somewhat greater than one, a 2dB increase in signal at the receiver input will cause the AGC to back off by 2 dB maintaining a constant output signal level but decreasing the background noise by 2 dB. For SNR's near the threshold of intelligible speech, (10 db approx) the 2dB increase can be quite beneficial, but as the SNR increases beyond 20 db or so, the difference will be negligible and ideally the transmitter power can be reduced to save power and reduce QRM.

In the case of a fading channel the average SNR required will be higher to allow for the short term fades and the analysis is more complicated.

bart wb6hqm

bart@wb6hqm.ent-img.com

Date: 31 May 94 13:27:00 GMT
From: news-mail-gateway@ucsd.edu
Subject: ES
To: ham-ant@ucsd.edu

Thanks to all for correcting my mistaken impressions about the origin of "es". Obviously, it isn't Spanish. I'm ESpecially grateful to Dave, KZ10 for giving us chapter and verse.....

"No one is exempt from speaking nonsense. The only misfortune is to do it solemnly." -Montaigne

.

KD1DJ, A1

Date: Tue, 31 May 1994 23:39:52 GMT
From: news!wrs.com!jerald@uunet.uu.net
Subject: Grid Dip Oscillator or Noise Bridge?
To: ham-ant@ucsd.edu

The budget is looking good for a new toy....

I am thinking of getting a piece of equipment to help me tune my new (and heretofore unerected) HF antenna and I debating the merits of couple of devices,

MFJ is selling two devices that I think are a grid dip oscillator and a noise bridge [If i've got this wrong, please correct me]

The Antenna Resistance Analyzer (tm) (I think) is a noise bridge.

The Bandswitched Dip Meter (tm) (once again I think) is a grid dip oscillator.

I can afford one but not both - so which one do I want?

What I'd like to do with them, is help me set and tune my antenna (tenatively a inverted-v into a transmatch)

Afterward, I'd like to use it to help me tune in all those interesting stations on bands I can't use. Tune up in a band for the best possible return out of the receiver?

Am I all wet here? I know I'm confused. Any help would be appreciated.

Thanks,
KC6RT0

A
A

--

Jerald R. Pendleton Email: jerald@wrs.com, Personal Email: jrpend@netcom.com
The preceeding message represents only the opinon of the author. This
do not represent the opinions/positions of Wind River Systems, my mother,
my wife or my poodle.

Date: 1 Jun 1994 00:57:50 GMT
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!europa.eng.gtefsd.com!
news.umbc.edu!eff!news.kei.com!ssd.intel.com!chnews!cmoore@network.ucsd.edu
Subject: Grid Dip Oscillator or Noise Bridge?
To: ham-ant@ucsd.edu

Jerald Pendleton (jerald@wrs.com) wrote:

: Am I all wet here? I know I'm confused. Any help would
: be appreciated. Thanks, KC6RT0

Jerald, IMHO the best single "instrument" you could purchase is an
antenna tuner. Put up a dipole, feed it with ladder-line, and use
the antenna tuner to work all bands. Don't worry about resonance...
the antenna tuner tunes the antenna system to resonance. Don't worry
about SWR... it doesn't matter much with ladder-line. I really don't
need to measure anything about my antenna except the SWR that the
transmitter sees. Good dipole lengths are 102 ft. and mine is 88 ft.
Both lengths work 80m-10m.

73 and good luck, KG7BK, CecilMoore@delphi.com

Date: 31 May 1994 12:21:06 -0400
From: newstf01.cr1.aol.com!search01.news.aol.com!not-for-mail@uunet.uu.net
Subject: Maltese quad
To: ham-ant@ucsd.edu

In article <2sd04e\$ctl@ugle.unit.no>, kenneth@Lise.Unit.NO (Kenneth
Opskar) writes:

Well, in the Apr or May issue of CQ, they featured this ant. the info
on it is to long to post, but if you can not find that issue, I could
possibly mail the info to you.

let me know.

73 Randy

KE6HCI@m6qmy.#nocal.ca.usa.noam
internet Randy753@aol.com

Date: 31 May 1994 13:37:14 GMT
From: newsgate.watson.ibm.com!watnews.watson.ibm.com!locutus.rchland.ibm.com!
georgtest.endicott.ibm.com!ludovids@uunet.uu.net
Subject: where to buy Channel Master FM antenna? recommendations on signal amp?
To: ham-ant@ucsd.edu

Wasn't sure wether to post this here, or on an audio group, but here goes...

Could someone tell me where I can get a good price on a Channel Master 3025 FM antenna? (was model #4408) Preferably close to, but not in, New York state to avoid sales tax on a mail order.

Also, any recommendations on a signal boosting amp to use with the antenna? I'm trying to receive a signal from an apparently low-powered translator that's about 85 miles from me.

Thanks alot,
Dave Ludovici
ludo@vnet.ibm.com

Date: Tue, 31 May 1994 22:29:53 GMT
From: ihnp4.ucsd.edu!library.ucla.edu!csulb.edu!csus.edu!netcom.com!
wa2ise@network.ucsd.edu
To: ham-ant@ucsd.edu

References <RG1veHX.armond@delphi.com>, <2sfps1\$a50@chnews.intel.com>,
<2sfvce\$dl@vixen.cso.uiuc.edu>
Subject : Re: Dipole help

In article <2sfvce\$dl@vixen.cso.uiuc.edu> ignacy@uiuc.edu (Ignacy Misztal) writes:
>Here is a more valid question: If one station is +2db over the other
>one, can you tell a difference? If both are calling you, which one
>would you copy better?

>

If on FM, capture effect will only let you hear the stronger station,
and wipe out the one 2dB weaker.

End of Ham-Ant Digest V94 #165
